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## Claims

 A method of determining the connectivity of switches in a computer network, each switch including a plurality of ports for connection to other switches and network elements, comprising:

determining all the possible port pairings;

determining a score for each port pairing; and

selecting the port paring having the highest score.

- 2. The method of Claim 1 wherein the score for each port paring is determined by determining how well the pairing conforms to a set of given properties.
  - 3. The method of Claim 2 wherein said properties include:
- 4. The method of Claim 1 wherein said steps are performed by a computer in the network.
- 5. The method of Claim 1 wherein selecting the port pairing having the highest score includes determining an upper threshold and a lower threshold, and discarding scores below the lower threshold.

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6. The method of Claim 5 wherein said upper threshold is set based on noise levels.